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INFORMATION DISCLOSURE STATEMENT Examining Group 3744 Patent Application Docket No. RTI-101XC1 Serial No. 10/625,014

April 28, 2004

Commissioner for Patents, P.O. Box 1450,

James S. Parker, Patent Attorney

Alexandria, VA 22313 on

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit

3744

Applicant(s):

Daniel P. Rini, Louis Chow, H. Randolph Anderson, Jayanta Sankar

Kapat, Bradley Carman, Brian Gulliver, Jose Mauricio Recio

Serial No.

10/625,014

Filed

July 22, 2003

Conf. No.

8426

For

Method and Apparatus for Highly Efficient Compact Vapor Compression

Cooling

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.56, 1.97, AND 1.98

Sir:

In accordance with 37 C.F.R. § 1.56, the references on the attached form PTO/SB/08 are being brought to the attention of the Examiner for consideration in connection with the examination of the above-identified patent application. Copies of the cited documents are enclosed.

The undersigned hereby certifies that each item of information contained in this statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.

2

It is respectfully requested that the Examiner indicate consideration of the cited references by returning a copy of the attached form PTO/SB/08 with initials or other appropriate marks. If any additional fee is required, or to credit any overpayment, please use Deposit Account No. 19-0065.

Applicants respectfully assert that the substantive provisions of 37 C.F.R. §§ 1.56, 1.97, and 1.98 are met by the foregoing statements.

Respectfully submitted,

James S. Parker Patent Attorney

Registration No. 40,119

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A Professional Association 2421 N.W. 41st Street, Suite A-1 Gainesville, FL 32606-6669

JSP/ba

Attachments: Form PTO/SB/08 (3 pages)

Copies of references cited

APR 3 0 2004 W

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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|---|---|----------------------|----------------|--------------------|------------------------|------------|
| | | | | Application Number | 10/625,014 | |
| | | | | Filing Date | July 22, 2003 | |
| STATEMENT BY APPLICANT | | First Named Inventor | Daniel P. Rini | | | |
| (use as many sheets as necessary) | | | Art Unit | 3744 | | |
| | | | | | Examiner Name | |
| Sheet | 1 | of | 3 | 3 | Attorney Docket Number | RTI-101XC1 |

| | U.S. PATENT DOCUMENTS | | | | | | | |
|-----------------------|-----------------------|--|--------------------------------|---|---|--|--|--|
| Examiner Initials* | Cite No. 1 | Document Number Number - Kind Code ² (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | | | |
| | U1 | US- 1,896,081 | 02-07-1933 | Hampson | All | | | |
| | U2 | US- 1,896,953 | 02-07-1933 | Hassell | All | | | |
| | U3 | US- 1,974,317 | 09-18-1934 | Steenstrup | All | | | |
| | U4 | US- 2,566,865 | 09-04-1951 | Wingerter | All | | | |
| | U5 | US- 2,768,508 | 10-30-1956 | Guyton | All | | | |
| | U6 | US- 2,920,463 | 01-12-1960 | Gould | All | | | |
| | U7 | US- 3,200,480 | 08-17-1965 | Heuer | All | | | |
| | _U8 | US- 3,214,087 | 10-26-1965 | Luck | All | | | |
| | U9 | US- 3,555,848 | 01-19-1971 | Johnson | All | | | |

| | | | | FOREIGN | PATENT DOCL | JMENTS | | |
|-----------------------|--------------------------|--------------------|-------------------|------------------------------------|--------------------------------|--|---|----------------|
| Examiner Initials* | Cite No. ¹ | For Country Code 3 | eign Patent Docun | nent Code ⁵ (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
| | F1 | СН | 106 312 | Α | 01-02-1925 | Kaegi Emil | All | |
| | F2 | DE | 160 351 | С | 05-10-1905 | Gustav Berger | All | |
| | F3 | DE | 848 656 | С | 09-08-1952 | Supraton GMBH Deutsche | All | |
| | F4 | FR | 1 158 943 | A | 06-20-1958 | Chantiers De L Atlantique | All | |
| | F5 | FR | 971 287 | Α | 01-15-1951 | J.L. See and AK De Ribert | All | |
| | F6 | GB | 1 590 923 | A | 06-10-1981 | Wankel GMBH; Borsig GMBH | All | |
| | F7 | GB | 2 107 852 | Α | 05-05-1983 | SECR Defence | All | |

| Examiner | Date |
|-----------|------------|
| Signature | Considered |

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard T.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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| | | | | Application Number | 10/625,014 | _ | | | |
| INFORMATION DISCLOSURE | | | | Filing Date | July 22, 2003 | | | | |
| STATEMENT BY APPLICANT | | | AIN I | First Named Inventor | Daniel P. Rini | | | | |
| (u | se as many sheet | s as nece | essary) | Art Unit | 3744 | | | | |
| | | | | Examiner Name | | | | | |
| Sheet | 2 | of | 3 | Attorney Docket Number | RTI-101XC1 | | | | |

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| | | | U.S. PATENT DO | DCUMENTS | |
|-----------------------|--------------------------|--|--------------------------------|---|---|
| Examiner Initials* | Cite No. ¹ | Document Number Number - Kind Code ² (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | U10 | US- 4,287,724 | 09-08-1981 | Clark | All |
| | U11 | US- 4,300,630 | 11-17-1981 | Trojani | All |
| | U12 | US- 4,630,669 | 12-23-1986 | Kessler et al. | All |
| | U13 | US- 5,097,897 | 03-24-1992 | Watanabe et al. | All |
| | U14 | US- | | | |
| | U15 | US- | | | |
| | U16 | US- | | | - |
| | U17 | US- | | • | |
| | U18 | US- | | | |

| | FOREIGN PATENT DOCUMENTS | | | | | | | | |
|-----------------------|--------------------------|---|--------------------------------|--|---|----------------|--|--|--|
| | | Foreign Patent Document | | | Pages, Columns, Lines, | | | | |
| Examiner Initials* | Cite No. ¹ | . Country Code ³ - Number ⁴ - Kind Code ⁵ (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Where Relevant Passages or Relevant Figures Appear | T ⁶ | | | |
| | F1 | | | | | | | | |
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| Examiner | | Date | |
| Signature | | Considered | |

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Complete if Known Substitute for form 1449B/PTO Application Number 10/625,014 INFORMATION DISCLOSURE July 22, 2003 Filing Date STATEMENT BY APPLICANT First Named Inventor Daniel P. Rini **Group Art Unit** 3744 (use as many sheets as necessary) **Examiner Name** Sheet Attorney Docket Number of 3 RTI-101XC1

| | | NON PATENT LITERATURE DOCUMENTS | |
|-----------------------|---------------|--|----------------|
| Examiner Initials* | Cite No. 1 | Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | R1 | LI, Q. et. al. "Heat Transfer and Pressure Drop Characteristics in Rectangular Channels with Elliptic Pin Fins" International Journal of Heat and Fluid Flow, 1998, pp. 245-250; Vol. 19. | |
| | R2 | OGURA, I. "The Ogura-Wankel compressor-Application of Wankel Rotary Concept as Automotive Air Conditioning Compressor" International Congress & Exposition, 1982. | |
| 1 | R3 | XP001187086 "Advanced Lightweight Microclimate Cooling System (ALMCS)" Natick Soldier Center, December 19, 2001. | |
| | R4 | XP001187087 "Portable Vapor-Compression Cooling System (PVCS)" Natick Soldier Center, December 19, 2001. | |
| | R5 | · | |
| | R6 | | |
| | R7 | | |
| | R8 | · | |
| | R9 | | |
| | R10 | | |
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| Examiner Date Signature Considered | | | |
|------------------------------------|-----------|------------|--|
| Signature Considered | Examiner | Date | |
| | Signature | Considered | |

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